

## AS A BELOW-NAMED INVENTOR, I hereby declare:

That pursuant to 37 CFR §1.68, I have been warned that willful false statements and the like are punishable by fine or imprisonment or both [18 USCA §1001] and may jeopardize the validity of the application or any patent issued thereon;

That I further confirm that all statements made on my own knowledge are true and that all statements made on information and belief are believed to be true;

That I, William M. Owens, make this Declaration in accordance with 37 CFR §1.63 in support of my application for an utility patent upon my Feedworks Device and in Reply to that certain Office Action dated 03/28/00;

That submitted herewith is a Reply to Office Action which contains amendments to the Specification, Drawing and Claims and a new Claim 14 submitted to overcome the 35 U.S.C. 103(a) Rejections and I certify that neither the amendments nor the new Claim contain new matter (37 C.F.R. 1.125;

That I request that objections or requirements as to form not necessary to the consideration of the Claims be held in abeyance until allowable subject matter is indicated, 37 C.F.R. 1.111(b);

That I have been in the lumber industry for 32 years and have been inventing, designing and making machines for the lumber industry since 1968;

That I received U. S. Patent Number 5,501,752 in March, 1996 on my "Wooden I - Beam Assembly Machine";

That the machines available to the industry were overly complicated and, except for the very expensive machines, i.e. hundreds of thousands of dollars, could not do the job of cutting/shaping wood boards at a constant rate without marring the wood surface or having wood wobble horizontally during the cutting/shaping operation;

That I reviewed all of the Patents contained in my disclosure statement and all the Patents provided by Examiner Goodman, which go back to the 1940s and none of them have solved the problem of creating a mechanically simple apparatus by placing known elements into a new combination unknown to the lumber industry;

As is shown by the myriad of Patents issued by the U. S. Patent Office, many, many inventors have tried to solve this problem to keep the rate of movement of wood boards through one or more cutters/shapers constant and maintaining alignment of the boards without side clamping;

That my claim for Patent is an improvement Claim over the existing art;

That if my improvements are anticipated or obvious, someone else would have been able to put this combination together since the 1940s;

That my invention is a commercial success and even though I make them myself, one at a time, I have sold the following:

Dec 1997 P. J. Lumber Co. \$38,000
Jan 1999 P. J. Lumber Co. \$46,800
Dec 1999 Sauder Wood Products \$70,000

Sales Pending to Buttevill Lumber Co., Northwest Forest Fibre Products, and Cascade Hardwoods;

That it takes over 6 months for me to manufacture one of these machines:

That I have numerous inquiries and others out on quote;

That U. S Patent 5,456, 148 issued to Jack L. Hoffa on 10 October, 1995, cited by Examiner Goodman as anticipating my invention (35 U.S.C. 102(b)) is classified by the Patent Office under Class 83 subclass 155, which is not searched for wood cutting Patents, see Cannaday U. S. Patent No. 5,396,938 and all other wood cutting U. S. Patents cited by the Examiner;

That U. S. Patent 5,456,148 is for a wire or cable machine to cut lengths or strip sheathing off of wire, and does not teach cutting the product

longitudinally only horizontally, nor does it teach how to sculpt or shape it by cutting away material;

That no one in the wood cutting machine industry would reasonably be expected or motivated to look to wire cutting machinery for a solution to the problems solved by my invention;

That wire, i. e. metal, acts differently than wood;

That the field of U. S. Patent 5,456,148 is not reasonably pertinent to the field of wood cutting and shaping;

That U. S. Patent 5,456,148 does not teach every aspect of my claimed invention explicitly and there is no extrinsic evidence cited by the Examiner that persons reasonably skilled in the art of wood cutting machine design would know of the missing portions, so that they can not be implied;

That the following differences are noted between U. S. Patent 5,456,148 and my claimed invention:

- a. It uses timing belts and timing sprockets (pulleys). They are not of laminated 'V' belt and flat belt construction. Its 'Vees' are gear-belt-cogs meant to transmit rotary power at an exact rate. Its 'Vees" are at 90 degrees to my claimed invention 'V' guides;
- b. Its belts' flanged side-guide between the outer flanged positions in sprockets are wider than the belt width, allowing for some side motion which is not suitable for my purposes. A key element of my claimed invention is that the wood tracks smoothly through the cutter/shaper without any side movement or wobble;
- c. It uses a means to transmit power to the top and bottom of the round wire piece, for its purposes. Our material to be cut/shaped is flat, however it is not uniformly flat or level. If we used power on both surfaces, the material might skew and not cut straight. My claimed invention uses a series of independent, non-powered, top hold down rollers for this reason;

- d. It does not have a continuous feed bed in the area of its rollers. Rather it has a system of three timing belt sprockets, providing a three point contact with the product. It has a continuous support in its wire cutting and stripping area only, while in my claimed invention the product is not supported allowing for our tooling configuration, although a support is envisioned to go around the tooling for bottom bed support;
- e. It provides that each set of sprockets and belts adjust, or float up/down from a common centerline (see Fig 7), while my claimed invention has a fixed bottom feed elevation which allows for an in-feed and out-feed product transport system with a fixed transport height;

That the references cited by Examiner Goodman in support of his rejection under 35 U. S. C. 103(a) and others cited in connection with the claim of obviousness do not present sufficient elements of my claimed invention to make is obvious to someone skilled in the art of making wood cutting machines and none suggest modifications or combinations to reasonable expect success in making my invention;

That the key to my invention is its mechanical simplicity and relatively low cost to manufacture and operate. the following point out some limitations of the references cited by the Examiner:

- a. Zimmerman, U. S. Patent No. 4,009,741, is a standard bottom roller feed machine with shaper tools adjacent to the splitter saw blade and not applicable to the problems my claimed invention solves;
- b. Chambers, U. S. Patent No. 5,637,068, claims "quick changing" of cutter tools and makes no mention of a non-skid belt nor a laminated 'V' belt;
- c. Baranski, U. S. Patent No. 4,681,005, unlike my claimed invention to process wide "flat" pieces that are greater in width than height, is a re-saw machine commonly used to split boards that are greater in height than

width, thus requiring a vertical means of holding and feeding a piece accurately through the cutting means. This machine is not practical for wide pieces and is far more complicated than my claimed invention, requiring numerous types of powered transport means with commensurate complication in speed matching of these drives, in order to transport the piece in a true straight line;

- d. Dunham, U. S. Patent No. 5,105,698, discloses a means of clearing a piece from the cutter tool, but has no functional requirement to hold or guide the piece for cutting in a true straight line;
- e. Mowery, U. S. Patent No. 2,999,518, does not apply as Owens makes no claims to a means to set or position cutters or fences;
- f. Pierce, U. S. Patent 2,664,927, claims refer to belts throughout, but they are actually chains and do not perform the functions of my 'V' guide belts;

That submitted herewith is an additional more restrictive claim submitted to overcome the 35 U.S.C. 103(a) rejections, if the amended original Claims rejected;

That attached hereto is a copy of the Report of Comparison of my invention to the more complex and expensive Mereen-Johnson Dip Chain Slatbed edger conducted by Rich Wagner, an engineer with the R & D department of the Weyerhauser Company in which he found that my invention produced comparable cut consistency but was twice as fast and cost less than 1/2 the Mereen-Johnson apparatus;

I declare under penalty of perjury under the laws of the State of Washington and the United States the foregoing to be true.

Executed this 26th day of June, 2,000 at Tacoma, Washington.

Slat width measurements to determine feed and sawing accuracy.

Measured 1 ft from each end & equal spaced 2 additional points. See lab notes for mercanto.



Board #	point 1	chng. 1 to 2	point 2	chng. 2 to 3	point 3	chng. 3 to 4	point 4	max-min
1-320	4.991,		4.986		4.996		4.990	0.010
		-0.005		0.010		-0.006		
2-320	3.315		3.317		3.295		3.249	0.068
		0.002		-0.022		-0.046		
3-320	2.933		2.929	0.000	2.935	0.054	2.989	0.060
	4.991	-0.004	5.000	0.006	4.007	0.054	4.002	0.000
4-320	4.991	0.000	5.000	-0.003	4.997	-0.004	4.993	0.009
5-320	4.890	0.009	4.907	-0.003	4.911	-0.004	4.876	0.035
	7.070	0.017	4.507	0.004	4.711	-0.035	4.070	0.033
6-320	4.838	0.017	4.851	0.001	4.866	-0.033	4.846	0.028
		0.013		0.015	7.000	-0.020		0.020
7-320	2.600		2.588		2.546		2.551	0.054
		-0.012		-0.042		0.005		
8-320	2.960	-	2.989		2.986		3.033	0.073
		0.029		-0.003		0.047		
9-320	3.043		3.020		3.006		3.053	0.047
		-0.023		-0.014		0.047		
10-320	3.043		3.035		2.998		3.004	0.045
		-0.008		-0.037		0.006		
Averages		0.002		-0.009		0.005		0.047
Max-Min		0.052		0.057		0.100		0.064
		•						
1-160	5.670		5.670		5.640		5.633	0.037
		0.000		0.030		0.007		
2-160	4.688		4.708		4.689		4.699	0.020
		0.020		-0.019		0.010		
3-160	5.644		5.658		5.666		5.663	0.022
		0.014		0.008		-0.003		
4-160 5-160	5.660		5.696	0.000	5.666		5.663	0.036
	2 020	0.036	2 049	-0.030	2041	-0.003	2 006	0.000
	3.920	0.028	3.948	-0.007	3.941	-0.016	3.925	0.028
6-160	3.090	0.028	3.131	-0.007	3.136	-0.016	3.127	0.046
	3.070	0.041		0.005	3.130	-0.009	3.127	0.046
7-160	3.422	0.041	3.433	0.003	3.429	-0.009	3.396	0.037
		0.011		-0.004	3.42)	-0.033	3.390	0.037
8-160	2.970		3.016		3.010	- 0.033	3.002	0.046
		0.046		-0.006		-0.008	3.002	
9-160	3.770	<del></del>	3.770	<del></del>	3.768		3.772	0.004
		0.000		-0.002		0.004	1	
10-160	2.801		2.811	•	2.816		2.802	0.015
		0.010		0.005		-0.014		
Averages		0.021		-0.002		-0.007		0.028
Max-Min		0.046		0.038		0.043		0.042